

Docket No. F-8690

Ser. No. 10/537,418

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) A water separation device comprising

a tubular member having a closed lower end and an upper end having an inlet for water dispersion organic solvent;

an outer tube having a discharge outlet for the organic solvent after separation of water ~~[[in]] on a lower portion thereof~~ end of the outer tube and an air vent hole ~~[[in]] proximal to an upper end of the outer tube on an otherwise continuous rising surface of the outer tube between the lower end of the outer tube and the upper end of the outer tube~~, said tubular member ~~being positioned within~~ extending into said outer tube through the upper end of the outer tube in such manner that the upper end of the tubular member is closer to the upper end of the outer tube than the lower end of the tubular member; and

a water separation membrane filter that is hydrophobic and insoluble by organic solvent provided on a rising surface between said lower end and said upper end of said tubular member, and whereby a water dispersion organic solvent may be filtrated by said water separation membrane filter at normal pressure to separate water.

Docket No. F-8690

Ser. No. 10/537,418

wherein the upper end of the tubular member is formed to have a large diameter portion, and said tubular member is fitted in said outer tube and stopped at the upper end of the outer tube at said large diameter portion, said membrane filter is made of tetrafluoroethylene, and the pore size of said membrane filter is 0.1 to 2 μm .

2-4. (Cancelled)

5. (Currently Amended) The water separation device according to Claims Claim 1 [(or 4)], wherein said tubular member has a side surface or bottom surface formed as a slope toward the lower end which converges on an extreme end, and said water separation membrane is secured to an opening formed in said slope.

6. (Withdrawn) The water separation device according to Claim 5, wherein a plurality of said outer tubes are formed as recesses in a plate at intervals, and said tubular member is fitted in said outer tubes.

7-9. (Cancelled)

Docket No. F-8690

Ser. No. 10/537,418

10. (Currently Amended) The water separation device according to Claim [[9]] 4, wherein said tubular member and said outer tube are formed of metal, glass or plastics.

11. (Withdrawn) A water separation method filtrating water dispersion organic solvent by a water separation membrane provided on a rising surface between a lower end and an upper end of a tubular member and thereby separating water.

12. (Withdrawn) The water separation method according to Claim 11, comprising formed said tubular member so that a lower end thereof is closed and an inlet for water dispersion organic solvent is provided at an upper part, positioning the tubular member within an outer tube having a sample discharge outlet at the lower part, and passing the organic solvent after separation of water through from the inside to the outside of said tubular member.

13. (Withdrawn) The water separation method according to Claim 12, comprising forming a side surface or bottom surface on said tubular member as sloping toward the lower end which converges on an extreme end, and securing said water separation membrane to an opening formed in said slope.

Docket No. F-8690

Ser. No. 10/537,418

14. (Withdrawn) The water separation method according to Claim 11, wherein said water separation organic solvent is a reaction liquid obtained from an organic chemical reaction or a processed liquid after reaction.

15. (New) The water separation device according to Claim 1, wherein the tubular member is loosely fitted in the outer tube, the lower end of the outer tube has a funnel shape contour having a narrower portion of the funnel shape contour distal to the upper end of the outer tube than a wider portion of the funnel shape contour, and there is a clearance between the tubular member and the outer tube so as to provide a passage sufficient to allow liquid to pass between the water separation membrane and the outer tube.